

REMARKS

Status of Claims

Claims 31-54 are pending, with claims 31-33 being independent.

Summary of the Official Action

In the instant Office Action, the Examiner rejected claim 46 as indefinite. Additionally, claims 31-54 were rejected over the art of record. By the present remarks, Applicant submits that the rejections are entirely improper, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

Telephone Interview of December 17, 2002

Applicant appreciates the courtesy extended by the Examiner in the interview of December 17, 2002. In that interview, Applicant's representative discussed the outstanding indefiniteness rejection regarding claim 46. Applicant's representative specifically pointed out that claim 45 recites the broad range whereas claim 46 recites a narrow range and that claims 45 and 46 are "different claims." The Examiner agreed to reconsider this rejection.

Applicant's representative also pointed out that VAN DER LELY lacks many of the recited features. Specifically, it was explained that claim 31 recites a mechanism (e.g., ref. 14) which biases the tools against the rotor and that each tool is "movably fixed to the rotor."

P20520.A06

It was also emphasized that claim 32 recites that the fixing end has a ring portion (e.g., ref. 2) that is “movably fixed to the rotor”, a soil engaging portion which is plate-like (e.g., ref. 4), and a mechanism (e.g., ref. 14) which biases the tools against the rotor. Finally, it was pointed out that claim 33 recites that the fixing end (ref. 2) can be “pivotally and removably mounted to the rotor” and an active portion (ref. 4) that has “an approximately planar portion having a sharp edge.” Accordingly, it was argued that none of these features were disclosed in the applied document.

In particular, it was pointed out that contrary to the Examiner’s assertions, the clip 22 does not act to bias “the tools against the rotor.” The tools 25 are clearly not biased against the rotor. Nor is there any engagement between the tools 25 and the clip 22.

It was also pointed out that the Examiner is entirely incorrect in asserting that each tool has a ring which receives a journal. The tools 25 clearly do not have a ring. To the contrary, the tools 25 have journals which are inserted in rings 23 of the rotor (see col. 2, lines 40-41 and 60-62). Moreover, it was emphasized that there is no disclosure indicating that the tools 25 can move in the holders 23. To the contrary, the way they are shown connected in the drawing strongly suggests that they cannot move once the nut 27 is tightened. Thus, it is clear that this document does not teach to “movably” mount the tools to the rotor as recited in claims 31-33.

Next, it was specifically argued that contrary to the Examiner’s assertions, the tools

P20520.A06

25 clearly do not have a planar active portion. It is clear from Fig. 5 that the ribs 44 and 45 are not planar. Finally, it was explained that the dependent claims further recite many features which are not disclosed by this document.

In response to these arguments, the Examiner mainly asserted that the claims “are not specific enough.”

Accordingly, in view of the arguments presented in the interview, Applicant respectfully requests that the Examiner reconsider the outstanding rejections.

Traversal of Rejection Under 35 U.S.C. § 112, Second Paragraph

Claim 46 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

The Examiner asserted that this claim is indefinite because it recites both a broad range and a narrow range. Applicant respectfully disagrees. Applicant directs the Examiner’s attention to claim 45 which recites the broad range, and to claim 46 which depends from claim 45 and which recites the narrow range. By the Examiner’s own admission, the rejection must be based on the broad range and the narrow range being recited “in the same claim.” See page 2, line 2 of paragraph 3.

Applicant reminds the Examiner that the essential determination as to whether the claims satisfy 35 U.S.C. 112, second paragraph, requires a consideration as to whether the claims set forth the invention with a reasonable degree of precision and particularity. The

P20520.A06

definiteness of claim language is not is analyzed in a vacuum, but rather, is considered in light of the prior art teachings and in view of Applicant's disclosure, as it would be interpreted by one having the ordinary level of skill in the pertinent art. *In re Moore*, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971).

In rejecting a claim under section 112, second paragraph, the Examiner is required to establish that one of ordinary skill in the art, when reading the claims in light of the specification, would not have been able to ascertain with a reasonable degree of precision and particularity the particular area set out and circumscribed by the claims. *Ex parte Wu*, 10 USPQ 2d 2031, 2033 (B.P.A.I. 1989). If the disclosure and claims are sufficient for one skilled in the art to understand, the Examiner "should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirements." MPEP 2173.02.

Accordingly, the rejection has been shown to be improper and the Examiner is requested to withdraw the indefiniteness rejection.

Traversal of Rejection Under 35 U.S.C. § 102

Applicant traverses the rejection of claims 31-54 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,050,519 to VAN DER LELY.

The Examiner asserted that this document discloses all the features recited in these

P20520.A06

claims including tools which have a ring portion and a mechanism which biases the tools against the rotor. Applicant respectfully traverses this rejection.

Notwithstanding the Office Action assertions as to what this document discloses, Applicant submits that VAN DER LELY clearly lacks, inter alia, a tool which is movably fixed to a rotor or which can be pivotally and removably mounted to a rotor, as recited in claims 31-33.

It is also clear that VAN DER LELY clearly lacks, inter alia, a mechanism for biasing the tools against the rotor, as recited in claims 31 and 32, inter alia, each fixing end comprising a ring portion which is movably fixed to the rotor via an axle, as further recited in claim 32, and inter alia, a tool having an active portion comprising a lower space zone and an approximately planar portion having a sharp leading edge, wherein the active portion projects towards a direction of rotation of a rotor when the tool is installed on a rotor, as recited in claim 33.

Applicant notes that there is entirely no disclosure to any of these recited features in VAN DER LELY. To the contrary, Fig. 2 of VAN DER LELY shows tools 25 which fixed to a rotor via flanges 23. It is noteworthy that the tools 25 do not move with regard to flanges. Thus, there is no apparent need to any biasing mechanisms whatsoever. In contrast, Applicant's claim 31 recites a biasing mechanism, e.g., plate 14, which biases the tools 1 against the rotor 12.

It is also clear that the tools 25 do not have a ring portion. To the contrary, the tools 25 are fixed to an internal opening of the flanges 23. Thus, there is no apparent need to provide the tools with ring portions. In contrast, Applicant's invention provides a ring portion, e.g., 2, which allows the tools to be mounted to the rotor 12.

Clearly, VAN DER LELY lacks many of the recited features and, the Examiner can point to no disclosure in support of this rejection other than to state that the claims are not specific enough. Nor is Applicant persuaded by the Examiner's clear mis-characterization of the document.

Applicant notes that claim 31 clearly recites a mechanism (e.g., ref. 14) which biases the tools against the rotor and that each tool is "movably fixed to the rotor." Moreover, claim 32 clearly recites that the fixing end has a ring portion (e.g., ref. 2) that is "movably fixed to the rotor", a soil engaging portion which is plate-like (e.g., ref. 4), and a mechanism (e.g., ref. 14) which biases the tools against the rotor. Finally, claim 33 clearly recites that the fixing end (ref. 2) can be "pivotally and removably mounted to the rotor" and an active portion (ref. 4) that has "an approximately planar portion having a sharp edge." None of these features have been shown to be disclosed in this document.

Instead, the Examiner erroneously opines that the clip 22 acts to bias "the tools against the rotor." The Examiner also erroneously concludes that the tools 25 are biased against the rotor, when in fact they are not. The Examiner also fails to appreciate or give patentable

weight to the fact that there is not even engagement between the tools 25 and the clip 22.

The Examiner further erroneously asserts that each tool 25 has a ring which receives a journal. Clearly, the tools 25 do not have a ring. To the contrary, the tools 25 have journals which are inserted in rings 23 of the rotor (see col. 2, lines 40-41 and 60-62). It is also apparent that this document contains no disclosure indicating that the tools 25 can move in the holders 23. To the contrary, Fig. 2 suggests that they are connected in a manner that would prevent any movement once the nut 27 is tightened. Thus, it is clear that this document does not teach to “movably” mount the tools to the rotor as recited in claims 31-33.

Nor does the Examiner provide a reasonable argument in support of his position that the tools 25 have a planar active portion. It is clear from Fig. 5 that the ribs 44 and 45 are not planar.

Finally, Applicant would like to point out the following examples of the Examiner’s clear mis-characterization of the reference:

The Examiner asserts that ref. 23 of VAN DER LELY is a ring. Applicant does not disagree, but notes that the tools 25 clearly do not have a ring and are clearly not movably mounted to a rotor.

The Examiner asserts that ref. 24 of VAN DER LELY is a journal. Applicant does not disagree, but notes that the tools 25 clearly are not mounted to a rotor via an axle and are clearly not movably mounted to a rotor.

The Examiner asserts that ribs 44 of VAN DER LELY can be characterized as planar. Applicant completely disagrees. Such an interpretation is clearly without any foundation.

Applicant respectfully submits that, for an anticipation rejection under 35 U.S.C. § 102(b) to be proper, each element of the claim in question must be disclosed in a single document, and if the document relied upon does not do so, then the rejection must be withdrawn.

Because this document fails to disclose at least the above mentioned features as recited in independent claims 31-33, Applicant submits that this document does not disclose all the claimed features recited in at least independent claims 31-33.

Finally, Applicant submits that claims 34-54 are allowable at least for the reason that these claims each depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper reading or modification of the applied document discloses or suggests, in combination: that the fixing end comprises an opening which is concentric to the pivot axis as recited in claim 34; that the soil cultivating machine comprises one of a weeding machine, a hoeing machine, and a vineyard plow when the tool is installed on a rotor as recited in claim 35; that the tool is adapted to be interchangeably mounted to a rotor when the tool is installed on a rotor as recited in claim 36; that the connecting portion is arranged to be inclined relative to a center axis running through a rotor when the tool is installed on a rotor

P20520.A06

as recited in claim 37; that the soil engaging portion extends radially outwardly from the fixing end as recited in claim 38; that the fixing end comprises a ring adapted to receive a journal axle as recited in claim 39; that the tool comprises a shape which resembles one of a hook and an "L" as recited in claim 40; that the soil engaging portion comprises at least one curved portion as recited in claim 41; that the active portion has an inclined portion and includes a first lower surface and a second lower surface, the first lower surface being arranged above the second lower surface when the at least one tool is mounted on a rotor as recited in claim 42; that the active portion comprises a boss portion as recited in claim 43; that the tool is installed on a rotor which is rotatably mounted on a soil cultivating machine as recited in claim 44; that when the tool is mounted on a rotor, the tool is adapted to pivot freely between an angle of 0° to 180° as recited in claim 45; that the tool is adapted to pivot freely between an angle of 45° to 65° as recited in claim 46; that when the tool is mounted on a rotor, the tool is adapted to pivot freely by an angle which is equal to or greater than 180° as recited in claim 47; that the pivot axis is not parallel to a center axis of a rotor when the tool is mounted to a rotor as recited in claim 48; that the pivot axis is not parallel to a center axis of a rotor when the tool is mounted to a rotor as recited in claim 49; that when the tool is mounted on a rotor, a guide is arranged adjacent a rotor as recited in claim 50; that when the tool is mounted on a rotor, a fixing flange is arranged to help retain the tool on a rotor as recited in claim 51; that the active portion comprises a surface that is approximately

P20520.A06

planar as recited in claim 52; that the active portion comprises a surface that is approximately planar and is oriented at an angle relative to a plane that is substantially perpendicular to the pivot axis as recited in claim 53; and that the angle is on the order of 6 degrees as recited in claim 54.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection of the claims under 35 U.S.C. § 102(b).

CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious Applicant's invention as recited in each of pending claims 31-54. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Please charge any fees necessary for consideration of the papers filed herein and refund excess payments to Deposit Account No. 19-0089.

P20520.A06

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,
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